SMITHSONIAN INSTITUTION.

In its annual report for 1880 the Smithsonian Institution purposes publishing a bibliography of American Anthropology for that year. The list will include not only the titles of works in that special branch, wherever issued, but also the publications of American scholars in all departments of this science, and you will confer a favor on the establishment by sending it a copy of each of your works upon the subject published during the year 1880. Should this be impracticable, however, please send a list of your own memoirs and of those of the scientific associations with which you are connected, bearing upon Anthropology, in each case giving the full title, author's name, edition, imprint, size, number of pages, maps, engravings, etc. If the publication forms a part of a periodical or of the proceedings of a scientific association, the fact should be distinctly stated. In the case of separate works, references to periodicals in which reviews have appeared should also be given.

In order to give permanent value to this list and to obviate delay in the appearance of the volume, you will oblige the Institution by complying with its request as soon as possible.

SPENCER F. BAIRD,
Secretary Smithsonian Institution.

WASHINGTON, D. C., February 1, 1881.

SCIENTIFIC SOCIETIES OF WASHINGTON.

THE BIOLOGICAL SOCIETY.—At the Biological Society, Friday evening, February 11, the entire evening was spent in discussing the annual address of President Theodore Gill, delivered at the previous meeting. Dr. White and Professor Ward, in company with the President, reviewed the arguments which have been offered by various naturalists, including Professor Burt G. Wilder and Dr. Coues, for the existence of antero-posterior symmetry in the vertebrates. The conclusion reached was, that, while there are many and very plausible reasons in favor of this view, on the whole, the weight of testimony is on the opposite side. Dr. King gave a description of one or two cases of hermaphroditism which had come under his notice. This was the occasion of an interesting discussion as to the meaning of the term and the possibilities of the phenomenon in the human subject. Professor Ward brought forward the arguments of Haeckel for the establishment of a kingdom of nature intermediate between the Vegetable and the Animal Kingdoms.

THE ANTHROPOLOGICAL SOCIETY.—The Anthropological Society met on Tuesday evening, February 15, Vice-President Mason in the chair. The following papers were announced: "Some peculiarities in the use of moods in the principal Neo. Latin Languages."—By H. L. Thomas. "Aboriginal burial cave in the Valley of the South Shenandoah."—By Elmer R. Reynolds. "Amphibious aborigines of Alaska."—By Ivan Petroff. Mr. Thomas, the translator of the State Department, announced that the object of his paper was to follow the history of the Latin rules respecting the sequence of moods in complex sentences in the languages of Southern Europe, commonly called Romance or Neo-Latin. The author directed attention to the fact that numerous editors of the last few centuries had made changes in the moods of Latin verbs in order to bring them under certain fixed rules from which the Latins had never varied. By numerous citations from very old editions these changes were exposed.

The next point elaborated was the national peculiarities which had manifested themselves in the adoption of Latin rules. The Portuguese, Spanish, French, Italian and Romance proper, had all affected the Latin usages in the use of the subordinate subjunctive, but had done this, so to speak, in their own way: which gives to the subject a special ethnologic value.

The author justly paid a high tribute to the opinion set forth by Professor Fay, in a communication made to the Society last year, that we are not to look in classical Latin but in the old Roman folk-speech for the ancestor of these borrowed forms. During the discussion which followed by Professor Antisell, Dr. Welling and the chair, the interesting question was mooted whether in the advance of scientific certitude the use of subjunctive or doubtful forms were not sloughed off.

Dr. Reynolds gave a brief but highly interesting description of a visit to a cave in Page valley, Virginia, near the celebrated Luray cavern, containing numerous human remains. The Smithsonian Institution had sent out many hundreds of circulars, to every post-office in the United States, but had failed to receive information of a single mound or permanent remain in the valley of Virginia. Dr. Reynolds, in the short space of a month traced twenty-five mounds, ossuaries, forts, ateliers, and bone caves. The paper was illustrated with a large collection of human bones, stone implements, and pottery.

AMERICAN CHEMICAL SOCIETY.

THE February *Conversazione* of the American Chemical Society took place Monday evening, the 21st inst. No papers were read, but a number of interesting specimens were exhibited. Among these was a quantity of that poisonous alkaloid, nicotine, which Mr. William Rupp, one of the curators of the society, had himself prepared. Mr. P. Casamajor, by means of a microscope with an 8-10 objective, showed a simple way to distinguish between pure sugar and that adulterated with glucose. The former crystalizes in large and characteristic forms while the glucuse appears much finer, and as poorly defined cystals. So that when the two are mixed no difficulty would be had in distinguishing the adulterated from the pure, provided a microscope was used.

A large piece of glass painted with Balmain's Luminous Paint was exhibited by Mr. M. Benjamin. This paint was discovered in 1877 by Mr. Balmain, an English chemist, and has recently been brought to this country. It possesses the peculiar power of phosphorescence, or the property of absorbing light during the daytime, and then emitting it in the darkness. It is prepared by calcining oyster shells with sulphur, and treating the resulting calcium sulphide with the proper articles necessary to form a paint.

Its uses are numerous; miners lamps are painted with it, and used instead of the ordinary safety lamp; it has been suggested that screens coated with this paint be used for illuminating purposes along the galleries of mines. Its marine applications are very important. the painting of life buoys, and also stationary buoys, so that they can be seen at night-time, the hulls and rigging of ships treated in this manner might prevent collisions. Divers costumes painted with it are found to yield light after the diver has descended, in fact, sufficiently so to enable him to distinguish quite minute objects.

Tunnels may be illuminated by this paint. It has been successfully employed to light railway cars at night time. The time of night is readily told from clocks and watches whose faces are coated with this substance. Signs and advertisements are among the many uses to which it may be put. More appplications will suggest themselves to every one.

M. B.

N. Y., Feb. 22, 1681.